

In response to the Office Action dated May 9, 2000, the Applicants wish to submit the following remarks.

REMARKS

All of the pending claims have been rejected under 35 USC § 102(b) as anticipated by the teachings of the Suzuki reference (European Patent No. 0688035). Applicants respectfully assert that the Suzuki reference does not teach a matrix addressed display device comprising a cathode means, grid electrode means comprising a first plurality of parallel row conductors and a second plurality of parallel column conductors arranged orthogonally to the row conductors; characterized in that the display device further comprises means for providing cut-off correction information to a one of said first or said second plurality of parallel conductors, as is specifically recited in independent Claim 1, and all of the remaining claims which depend therefrom.

The Suzuki reference discloses a cold cathode matrix display having rows and columns of conductors which are addressed by providing a signal determined by an electron element current determining means. The cited component of the Suzuki reference, namely the correcting means for correcting the element current determined by the electron element current determining means, comprises a leakage current determining means for determining a

leakage current which is passed through an unselected row of the matrix which neighbors the particular row of interest. The leakage current determining means determines a value for the leakage current of a particular row either by measuring the leakage current in the unselected neighboring row or by reading a stored leakage current value for the particular row from a memory location. Once the leakage current has been determined, that leakage current is added to the electron element current (from the electron element current determining means) and the combined current is then applied to the particular row.

The Suzuki reference teachings do not anticipate the claimed structure which explicitly includes "means for providing cut-off correction information to a one of said first or said second plurality of parallel conductors." As a first distinction, it must be noted that the Suzuki teachings regarding determining leakage current and adding that determined leakage current value to the electron element current cannot be said to anticipate cut-off correction information. Adding leakage current is not the same as, nor is it even suggestive of, cut-off correction information. The Examiner's attention is directed to the teachings of the present specification wherein the cut-off correction is defined on page 5, line 7, equation (1). Clearly, the recited cut-of correction information is not the same as the Suzuki leakage current value.

Another basis for distinguishing the presently-claimed invention from the Suzuki reference is the fact that the Suzuki reference explicitly teaches that the determined leakage current is specific to a particular row (as measured or stored based on readings from a neighboring row). Furthermore, the Suzuki leakage current is added to the electrode element current for the particular row to arrive at a combined current for only that row. Thereafter, the combined current is applied to only that particular row. Suzuki does not teach that its combined current be provided to one of said first or said second plurality of parallel conductors, as is explicitly claimed. While the present invention teaches and claims that cut-off correction information be applied to all of the row conductors or all of the column conductors, such is neither taught nor suggested by the Suzuki teachings of selectively determining a leakage current for a particular row, adding that determined leakage current to a specific electrode element current for that particular row to arrive at a combined current, and applying the combined current only to that particular row. Applicants respectfully assert that the Suzuki teachings clearly do not teach means for applying cut-off correction information to all of the first plurality of conductors (e.g., rows) or all of the second plurality of conductors (e.g., columns), as is expressly recited in all of the pending claims.


For a reference to anticipate claim language under 35 USC § 102(b), that reference must teach each and every feature which is recited in the claim. Since the Suzuki reference does not teach means for providing cut-off correction information, nor does it teach that the means provide cut-off correction information to one of the first plurality of parallel conductors or the second plurality of parallel conductors, it cannot be maintained that the Suzuki reference anticipates each and every claim feature. As such, Applicants request that the anticipation rejection based on the teachings of the Suzuki reference be withdrawn.

Applicants also point out that the teachings of the Suzuki reference cannot be said to obviate the invention as claimed since the Suzuki teachings require that the combined (i.e., leakage compensation plus electrode element) current be applied only to the row for which the combined current was determined. To suggest that the same combined current be applied to all rows or columns would render the Suzuki teachings unworkable, since applying the same amount of leakage compensation current to all neighboring rows would not compensate for actual leakage at a particular row and could, in fact, escalate the leakage. Clearly the Suzuki reference does not include any suggestion of such application of information to all rows or all columns. Moreover, since to modify the Suzuki teachings to apply the information to all rows or all columns would make it unworkable, such could not be considered obvious. It is well established under U.S. Patent

Law that modification of teachings cannot be considered obvious to one having skill in the relevant art if such modification would render the teachings unworkable for their intended purpose. Clearly, therefore, it cannot be maintained that the teachings of the Suzuki reference obviate the invention as claimed.

Based on the foregoing amendments and remarks, Applicants request withdrawal of the rejections and issuance of the claims.

Respectfully submitted,  
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